CT DEP LEAN INITIATIVE

Presentation January 5, 2010



Amey Marrella Commissioner Jeff Caiola, Supervising Civil Engineer Bureau of Water Protection & Land Reuse Inland Water Resources Division

Peter Hill, Environmental Analyst III Bureau of Water Protection & Land Reuse Remediation Division

Kim Hudak, Assistant Director
Bureau of Materials Management & Compliance Assurance
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George Purple, Environmental Compliance Specialist III Bureau of Materials Management & Compliance Assurance Emergency Response and Spill Prevention Division

Donna Seresin, Environmental Analyst III
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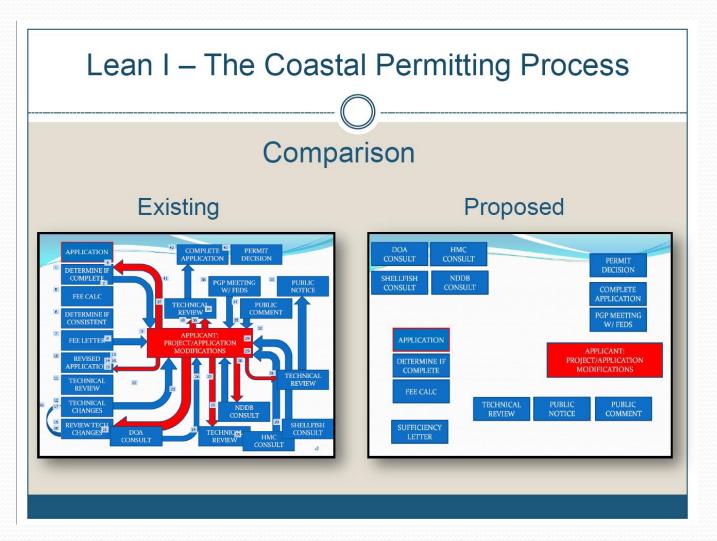
Why Lean at DEP?

To eliminate timeconsuming steps that add no value.



Enabling us to focus on our agency's mission Protecting the Environment!

Eliminate Time Consuming Steps



DEP's Commitment while on the LEAN Journey

 Instill a culture shift toward continuous improvement;



- Create support at all levels within the Agency;
- Create support within the regulated community;
- Keep all interested groups (internal and external) informed of changes.

Important Dates

Sept. 2006

- HR introduces LEAN as part of in-house staff development

January 2008

- A small group of managers & supervisors attend LEAN Enterprise Tool Certification Program

February 2008

- Implementation Team formed under Deputy Commissioner's guidance
- Team develops an Implementation Plan

<u>April 2008</u>

- The implementation plan "LEANING at CT DEP: Implementation Plan" is finalized
- Agency schedules "5S" Record Retention / floor clean up

June 2008

- A dedicated website is drafted for the agency's Intranet
- 1st Kaizen Event (3 teams)

July / August 2008

- A member of the Implementation Team is assigned to serve as LEAN Coordinator

The LEAN Journey Continues.....

- 5 Subsequent Kaizen events (17 Projects; approx. 140 staff)
- Governor's Office recognizes DEP's efforts and directs three other state agencies to evaluate LEAN (Nov. 2009)

Key Performance Indicators

Permitting

Bureau of Water Protection and Land Re-Use

OLISP

- Processing time reduced from <u>566</u> days to <u>131</u> days
- **<u>18</u>** forms to **<u>10</u>** forms

IWRD

- Processing time reduced from <u>150</u> to <u>44</u> days
- 7 Programs to <u>2</u> technical disciplines
- Reduced application backlog from <u>300+</u> to <u>135</u>

Bureau of Materials Management & Compliance Assurance

WPED - Days to Tentative Determination reduced from <u>925</u> to <u>112</u> days

Key Performance Indicators

Enforcement

Bureau of Materials Management & Compliance Assurance

WPED

- Reduce timeframes for drafting formal enforcement by 75%
- Close 78 % of the NOV backlog

UST

- Time to issue an NOV has decreased by 50%
- Number of inspections conducted annually has tripled since

Shifting **Cultural Dynamics Starts** Within



Policies and Procedures

Building & Facilities

Employee Information

Health, Safety, & Wellness

Information Management and Information Technology

Jobs & Benefits

Employee Development

In The News

Tools

Related Organizations











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Introduction to Lean by Acting Commissioner Amey W. Marrella

Welcome to the Department of Environmental Protection's Lean Initiative! I am excited that our agency has begun to apply Lean principles and practices to improve the way we do business. We will become more efficient while maintaining our environmental requirements and as a result, we will be able to address new environmental challenges as they arise. We will eliminate time-consuming steps that add no value and spend our time instead on what we do best - protecting the environment. These web pages serve as a comprehensive resource to learn about the concepts of Lean and provides you with information about various projects the agency has identified for process improvement.

Background: DEP has undertaken a number of process improvements over the years and has had some success in areas such as standardizing forms and practices (e.g., permitting and enforcement documents and Notices of Violation), streamlining processes (e.g., Delegation of Authority), and implementing visuals (e.g., color-coded

In January 2008, several of the Bureau Chiefs and Division Directors attended a oneday Introduction to Lean and fifteen more staff attended a four-day Certification Program to learn how to integrate the Lean philosophy into the agency. In April 2008, the Lean Implementation Team, consisting of those who attended the four-day program, submitted an Implementation Plan for Commissioner McCarthy's review. Visit the Leaning at CT DEP: An Implementation Plan to learn more.

In June 2008, three teams of pioneers from the Bureaus of Air Management, Materials Management and Compliance Assurance, and Water Protection and Land Reuse launched our first Lean event. For information on all the teams that have participated since then, visit the Lean Project Teams section.

To learn more about how other state environmental agencies are incorporating Lean into their business processes, be sure to visit www.epa.gov/lean and review the documents under "Lean Manufacturing and the Environment" and "Administrative Lean."

I am confident that once you learn more about the Lean philosophy and the innovation, energy, and success of our DEP Lean teams, you'll understand why so many of us are so enthusiastic about Lean.

Additional Information

Resources

Education and Outreach Communications

Forms

Lean Project Teams

For more information, contact: Karen Caliendo, Lean Coordinator, 860-424-3163

Content last updated July 2009

Printable Version

Constant Gentle Pressure

Tools

Related Organizations











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DEP Lean Events

June 2008 - Lean I Projects

- Kaizen Event Agenda June 2008
- . Major Source Air Permitting Team Leader: Dave Wackter
 - Team Charter
 - o Presentations June 2008 September 2008
 - o Project Plan Implementation Status
 - o Summary Status Report
 - o Air Permit Modeling
- Evaluation of the Water Permit and Enforcement Programs Team Leaders: Donna Seresin and Will Oros
 - o Team Charter
 - o Presentations June 2008 September 2008
 - o Project Plan Implementation Status
 - o Summary Status Report
 - o Key Performance Indicators
- Improvement in the Office of Long Island Sound Program Permit Processing Timeframes - Team Leader: Sue Bailey
 - o Team Charter
 - o Presentations June 2008
 - o Project Plan Implementation Status
 - Summary Status Report
 - Coastal Permitting Resources

October and December 2008 - Lean II Projects

- Kaizen Event Agenda October 2008 December 2008
- Improvement in Solid Waste Enforcement Program Team Leader: Darlene Sage
 - Team Charter
 - o Presentation October 2008
 - Project Plan Implementation Status
 - o Summary Status Report
- Evaluation of the Storage Tank Compliance Inspection Process Team Leader: George Purple
 - o <u>Team Charter</u>
 - o Presentation October 2008
 - o Project Plan Implementation Status
 - o Summary Satus Report
- Inland Water Resources Division Permit Sufficiency Review Team Team Leader: Jeff Caiola
 - o Team Charter
 - o Presentation October 2008
 - o Project Plan Implementation Status
 - o Summary Status Report
- Statewide Fish Distribution Quinebaug Hatchery Team Leaders: Dave Sumner and Tim Barry
 - Team Charter
 - o Presentation December 2008
 - o Project Plan Implementation Status
 - o Summary Status Report
 - o Staff Time Stocking June 2009

February 2009 - Lean III Projects

- Kaizen Event Agenda February 2009
- Transition from Teaching Boating Safety Education to Testing Team Leader: John Annino
 - o Team Charter
 - o Presentation February 2009

Quarterly Reports



CTDEP Lean Journey: Lean II Project Team October 2008 Kaizen Event) Summary, July 2009
Evaluation of the Sufficiency Review process for Inland Water Resources Division's various regulatory programs

Project / Bureau: Evaluation of the Sufficiency Review process for Inland Water Resources Division's various regulatory programs /

Bureau of Water Protection and Land Re-Use

Team: Total number of team members = 10 (6 staff within Division / 4 staff outside Division)

Team Sponsors: Betsey Wingfield, Bureau Chief/ WPLR

Team Leaders: Jeff Caiola, Supervising Civil Engineer/ Inland Water Resources Division

Team Members: Gary Steinhaus, CE Intern/WPLR; Sharon Yurasevecz CE 3/WPLR; Robert Gilmore Supervising EA/WPLR; Sara Radacsi, EA 3/ WPLR; Stacy Pappano, San

Engineer 3/ WPLR; Brian Golembiewski, EA 3/ Office of the Commissioner; Tammy Talbot, Supervising EA / BOR

Team Champion: Denise Ruzicka, Director / Inland Water Resources Division

Opportunity Statement: It currently takes the Engineering and Environmental Analysis Sections of the Inland Water Resources Division six to nine months to initially review an application and respond to an applicant creating an 18 month back log for the various regulatory programs (Inland Wetlands & Watercourses, Floodplain Management, Stream Channel Encroachment Line, Water Diversion, Dam Safety and Water Quality Certification). The work process under review is the sufficiency review process which encompasses the time from when an application is submitted to when it is either determined insufficient or sufficient for a technical review.

Objective: Conduct Value Stream Mapping for the various regulatory programs for the Sufficiency Review process; eliminate wastes and/or non-value added steps found in the administrative process; identify ways to improve administration of the various regulatory programs; and establish baseline measures for the Division's regulatory

processes.

Goals/Key Performance Indicators:

| Pre-Kaizen Event Goals - June 2008 | Post Kaizen Event Results/Key Performance Indicators – status: July 2009 |
|---|--|
| Reduce response times back to applicants by 40% | Trends indicate that the sufficiency review process is being completed within 90 days which reduces the initial response time back to applicants by 67%. |
| | The Division's backlog of pending applications has been reduced from a high of 300+ to 164! |
| | ❖ Trends indicate that the 90 day sufficiency review timeframe is being met 83% of the time. |
| Reduce administrative time involved with file creation and filing applications. | Establish electronic filing |
| | ❖ Improvement for the Environment |
| | 200 applications per year = 100,000 sheets of paper = 85 trees saved if filed electronically. |
| | Mprovements for our Customers |
| | \$\$\$ saved from producing paper copies = \$800 - \$1200 per app |
| | Hours saved producing paper copies of application (DEP Parks 1 day = 7 hours per application / 30 applications per year = 210 hours saved) |
| Improve communication between regulatory staff. | Eliminate 7 separate regulatory programs to 2 technical disciplines. |

Rev. 7/31/2009

Visuals Reminders







Celebrating a Year of LEAN



Commissioner Marrella recognizing everyone's hard work over the past year.

LEAN Open House





Next Steps for DEP

strategic plan

PLAN **ACT** on the implementation plan - New members to be on the -internal training course for Plan Implementation Team **DEP** staff - Continual improvement - Plan additional projects - Sustain momentum Act DO **CHECK** to see how LEAN **DO** more Kaizen projects are progressing and Check Events Jan. & how future projects June 2010 correlate with the agency's

Questions?



Movie Green and LEAN

http://www.ct.gov/insidedep/cwp/view.asp?a=3645&q=429036&insidedepNav GID=1848